

CLAIMS:

1. A tape for removing debris from a surface to be cleaned, comprising:
 - a backing; and
 - 5 a pressure sensitive adhesive layer that includes at least about 56% by weight tackifier;
 - wherein the tape is adapted to remove debris from a surface without substantially adhering to the surface.
- 10 2. The tape of claim 1, wherein the adhesive layer includes at least about 58% by weight tackifier.
3. The tape of claim 1, wherein the adhesive layer includes at least about 60% by weight tackifier.
- 15 4. The tape of claim 1, wherein the adhesive layer includes more than 60% by weight tackifier.
5. The tape of claim 1, wherein the adhesive layer exhibits a rolling ball tack distance
20 according to ASTM D3121 of at least about 500mm.
6. The tape of claim 1, wherein the adhesive layer exhibits a rolling ball tack distance according to ASTM D3121 of at least about 750mm.
- 25 7. The tape of claim 1, wherein the adhesive layer exhibits a rolling ball tack distance according to ASTM D3121 of at least about 1000mm.
8. The tape of claim 1, wherein the adhesive layer exhibits an adhesion to stainless steel in accordance with ASTM D3330/D3330M of at least about 5 N/10mm.
- 30 9. The tape of claim 1, wherein the surface to be cleaned includes a non-porous surface.

10. A tape roll, comprising:
a plurality of tape layers, each tape layer removable from an adjacent underlying
layer; and
5 an adhesive coating adhered to an outer surface of each layer, the adhesive coating
including at least about 56% by weight tackifier.

10 11. The tape roll of claim 10, wherein the adhesive coating includes at least about 58%
by weight tackifier.

12. The tape roll of claim 10, wherein the adhesive coating includes at least about 60%
by weight tackifier.

15 13. The tape roll of claim 10, wherein the adhesive coating includes more than 60% by
weight tackifier.

14. The tape roll of claim 10, wherein the adhesive coating exhibits a rolling ball tack
distance according to ASTM D3121 of at least about 500mm.

20 15. The tape roll of claim 10, wherein the adhesive coating exhibits a rolling ball tack
distance according to ASTM D3121 of at least about 750mm.

16. The tape roll of claim 10, wherein the adhesive coating exhibits a rolling ball tack
distance according to ASTM D3121 of at least about 1000mm.

25 17. The tape roll of claim 10, wherein the adhesive coating exhibits an adhesion to
stainless steel in accordance with ASTM D3330/D3330M of at least about 5 N/10mm.

30 18. A tape roll for removing debris from a surface to be cleaned, comprising:
a plurality of tape layers, each tape layer removable from an adjacent underlying
layer; and

an adhesive coating that includes at least about 56% by weight tackifier, adhered to an outer surface of each layer;

wherein the adhesive coating of the outermost tape layer removes debris from the surface to be cleaned without substantially unwinding from the adjacent underlying layer.

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19. The tape roll of claim 18, wherein the surface to be cleaned includes a non-porous surface.

10 20. The tape roll of claim 18, wherein the adhesive coating includes at least about 58% by weight tackifier.

21. The tape roll of claim 18, wherein the adhesive coating includes at least about 60% by weight tackifier.

15 22. The tape roll of claim 18, wherein the adhesive coating includes more than 60% by weight tackifier.

23. The tape roll of claim 18, wherein the adhesive coating exhibits a rolling ball tack distance according to ASTM D3121 of at least about 500mm.

20 24. The tape roll of claim 18, wherein the adhesive coating exhibits a rolling ball tack distance according to ASTM D3121 of at least about 750mm.

25 25. The tape roll of claim 18, wherein the adhesive coating exhibits a rolling ball tack distance according to ASTM D3121 of at least about 1000mm.

26. The tape roll of claim 18, wherein the adhesive coating exhibits an adhesion to stainless steel in accordance with ASTM D3330/D3330M of at least about 5 N/10mm.

30 27. A tape roll for removing debris from a surface to be cleaned, the tape roll comprising:

a plurality of tape layers, each tape layer removable from an adjacent underlying layer; and

an adhesive coating adhered to an outer surface of each layer that includes at least about 56% by weight tackifier, wherein the adhesive coating adheres debris contained on the surface to be cleaned to an outermost tape layer without substantially adhering the outermost tape layer to the surface to be cleaned.

28. The tape roll of claim 27, wherein the surface to be cleaned includes a non-porous surface.

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29. The tape roll of claim 27, wherein the adhesive coating includes at least about 58% by weight tackifier.

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30. The tape roll of claim 27, wherein the adhesive coating includes at least about 60% by weight tackifier.

31. The tape roll of claim 27, wherein the adhesive coating includes more than 60% by weight tackifier.

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32. The tape roll of claim 27, wherein the adhesive coating exhibits a rolling ball tack distance according to ASTM D3121 of at least about 500mm.

33. The tape roll of claim 27, wherein the adhesive coating exhibits a rolling ball tack distance according to ASTM D3121 of at least about 750mm.

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34. The tape roll of claim 27, wherein the adhesive coating exhibits a rolling ball tack distance according to ASTM D3121 of at least about 1000mm.

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35. The tape roll of claim 27, wherein the adhesive coating exhibits an adhesion to stainless steel in accordance with ASTM D3330/D3330M of at least about 5 N/10mm.

36. A method of removing contaminants from a surface to be cleaned, the method comprising the steps of:

providing a tape roll comprising:

a plurality of tape layers, each tape layer removable from an adjacent
5 underlying layer; and

an adhesive coating adhered to an outer surface of each layer, wherein the
adhesive coating includes at least about 56% by weight tackifier;
and

rolling the tape roll along the surface to be cleaned such that the adhesive
10 coating adheres debris contained on the surface to be cleaned to an
outermost tape layer of the tape roll.

37. The method of claim 36, wherein the adhesive coating on the outermost tape layer adheres more strongly to the underlying layer than to the surface to be cleaned.

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38. The method of claim 36, wherein the adhesive coating includes at least about 58% by weight tackifier.

39. The method of claim 36, wherein the adhesive coating includes at least about 60%
20 by weight tackifier.

40. The method of claim 36, wherein the adhesive coating includes more than 60% by weight tackifier.

25 41. The method of claim 36, wherein the adhesive coating exhibits a rolling ball tack distance according to ASTM D3121 of at least about 500mm.

42. The method of claim 36, wherein the adhesive coating exhibits a rolling ball tack distance according to ASTM D3121 of at least about 750mm.

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43. The method of claim 36, wherein the adhesive coating exhibits a rolling ball tack distance according to ASTM D3121 of about at least 1000mm.

44. The method of claim 36, wherein the adhesive coating exhibits an adhesion to stainless steel in accordance with ASTM D3330/D3330M of at least about 5 N/10mm.